Operations Engineer START s weighing required? (See Note 1 Yes Obtain Form B Weighing Record from the pilot's office Weigh Aircraft (See Note 2) Complete Form B Update Chart C - Basic Weight and Balance Record Calculate CG Complete Weight and Balance Form F Distribute Form F copies to pilot(s) Update weight and balance data master log and return to file to the pilot's office

END

AIRCRAFT WEIGHT AND BALANCE (W&B)

Dryden Flight Research Center DOP-O-023 Revision: E

Objectives:

-to manage aircraft weight and balance

Electronically Approved By:
Director, Flight Operations Directorate

Note 1:

Aircraft in operation at DFRC will be weighed and balanced under any of the following conditions:

- 1. Time compliance requirement (See Chart "A")
- 2. Major repair or modification
- 3. Unsatisfactory flight characteristics
- 4. Calculated weight and balance suspect

Note 2:

Options: Advance scheduling of AFFTC Weighing Facility or Portable Electronic Scales

CHART "A"

AIRCRAFT CATEGORY	WEIGHING INTERVAL	
Research Aircraft: Fundamentally experimental in the design of one or more of its systems, intended for aerospace technology research (e.g.: F-18 SRA, F-15 B, etc.)	Annually *	
Platform Aircraft: A production type aircraft with non-experimental flight systems, which serves as a platform for earth science or other scientific sensors and data gathering equipment (e.g.: ER-2, DC-8)	Per Tech Order or following major instrument upload **	
Support Aircraft: Production type aircraft which "support" research missions (safety chase, photo, and video coverage), launch aircraft for research or other manned or unmanned vehicles (e.g.: T-34, F-18, B-52)	3 Years For all types **	
Mission Management Aircraft: Production Aircraft, FAA certified for passenger transport (e.g.: KingAir)	3 Years **	
* May be deferred by operations engineer for good reason, up to 3		

^{*} May be deferred by operations engineer for good reason, up to 3 months. Any further deferment requires OE branch chief (or higher) approval.

Check the list at

http://www.dfrc.nasa.gov/Business/DMS/index.html.

VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE.

PRINTED DOCUMENT FOR REFERENCE ONLY.

^{**} Deferment requires OG division level or "O" directorate level approval.

DOCUMENT HISTORY PAGE

DOP-O-023 Revision: E

This page is for informational purposes and does not need to be retained with the document.

DATE APPROVED	<u>ISSUE</u>	<u>PAGE</u>	AMENDMENT DETAILS
3/29/99	Baseline		
4/12/99	Α	1	Change: "Tow aircraft to Edwards Weight and Balance Facility" in block 1 of Crew Chief
5/11/99	В	1	Add blocks 1 and 2 of Operations Engineer Move block "Update Chart C - Basic weight and Balance Record" above block " Complete Weight and Balance Form F" of Operations Engineer
6/14/99	С	1	Major changes to chart
11/28/00	D	1	Change: "Operations Engineer" responsibilities and Note 1. Add: Note 2 and Chart "A"
4/25/03	E	1	Traceability change - change location of records and log. Ref.pg.1, Blk 2-Change to read; Obtain Form B Weighing record from the pilots office.
			Ref. pg.1,Blk 9-Change to read; Update weight and balance data master log and return file to the pilots office.